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ABSTRACT

The assessment of the current status and viability of practical nursing education in the state of Minnesota focused on the competencies required of the licensed practical nurse (LPN) from the employer's point of view. Because of the overlap of provided services, the competencies were assessed relative to all other levels of nursing (associate degree nurses, diploma nurses, baccalaureate degree nurses, and nursing aides). The information was gathered using three methods: (1) basic "library" research of appropriate documents, (2) interviews of nursing directors, hospital administrators, and others responsible for hiring and/or directing nurses and, (3) distribution of questionnaires to nurses at all levels, directors of nursing, and hospital administrators. When it was discovered that the questionnaire did not discriminate clearly, less reliance was placed on it, especially because of the success of the interviews. Although the results of the interviews showed that those who hire and utilize nurses consider the LPN to be an excellent and often preferred entry level practitioner with the required competencies, the findings of the library research indicated that those who propose changes in the structure and format of nursing education (professional associations and those in educational agencies who direct the fate of nursing programs) support the elimination of the LPN position. (VE)

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ED153033

A STUDY OF THE STATUS AND VIABILITY OF LICENSED PRACTICAL NURSING PROGRAMS IN THE STATE OF MINNESOTA

FINAL REPORT

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NOVEMBER, 1977

CE 015 670

PREFACE

The attached information is a copy of the final report for the project entitled "A Study of the Status and Viability of Licensed Practical Nursing Programs in the State of Minnesota". The Division of Vocational-Technical Education, Minnesota Department of Education, commissioned the study to secure information for curricular concerns regarding the licensed practical nurse programs in the state. Currently, curricular modifications for all educational levels are being suggested within Minnesota.

The study was initiated as a result of over-all concerns for the future of practical nurse education. The process by which this was accomplished took place in the following manner.

The concern became evident to practical nurse educators in ordinary dialogue with various nursing persons as well as during formalized meetings with various nursing groups. There was a definite feeling, if not a foregone conclusion, that practical nursing programs, in time, would be eliminated. Comments such as "We have come of an age where Practical Nursing has no role", were expressed. This naturally caused grave concern among the practical nurse educators who, as a group on several occasions, had instituted major changes. They were the first group, among all the levels of nursing education, to develop statewide practical nursing program competency statements; and were considered the first group to endorse educational mobility within nursing, beginning with the nursing assistant, practical nurse and the associate degree nurse.

During discussion at one of the statewide practical nurse program directors' meetings, it was decided to form a committee on the Future of Practical Nurse Education (hereafter referred to as COFOPNE). This committee consists of representative educators from private, community college and area vocational-technical institute practical nurse programs.

Following several meetings of the COFOPNE, it was decided that a study of nursing education was in order. It was their intent to look at nursing education from the employer's perspective. It was especially important to this committee that the study would be considered a valid and credible study to all persons in the nursing profession, as well as the educational systems. The issues in nursing are not only practical nurse education, but all of nursing education. The question was raised, "Should we, therefore, not be including all levels of nursing in a study?".

In an attempt to include all of nursing, the committee contacted a major local nursing educational institution. A request was made for their assistance in becoming involved in a study with a possibility of them also conducting the research. Dialogue was also instituted with various nursing organizations to pursue the study as a joint endeavor. Although these contacts had been made, the various nursing segments chose not to participate.

The committee continued, however, to feel committed to their endeavor. Despite the possible ramifications to themselves, they felt it very important, at this point in time, to look at what employers really wanted and needed from the practical nurse. To accomplish this, it was decided to conduct a survey that would give an open and honest evaluation of the status of practical nursing today.

The COFOPNE felt it important to select a company to do the research which would not be partial to any level of nursing. The prescribed state contract procedures were utilized; which includes conducting interviews and reviewing Requests for Proposals. Following review of the evaluation forms utilized, it resulted in a recommendation to select Educational Management Services, Inc.

The study's thrust focused on licensed practical nurse programs; however, it was also necessary to consider the whole spectrum of nurse education and employment since changes at one educational level impact upon all the other levels. Curricular decision-making in this area has been hampered in the past because little substantive data or information existed concerning nurse programs. This study is the first effort at systematically deriving information needed before effective decisions regarding the future of nursing can be made.

As is true in many research efforts, the study raised more questions than it answered. One of the procedures used to gather data for the study was the interview technique. Using this technique usually results in more data than can be reported and involves more subjective analysis than other data collection schemes. On the other hand, interview data also can be some of the most meaningful information and potentially, at least, could have the most impact on the study. Several significant problem areas were noted which must be addressed before viable solutions to the problems can be achieved.

The study identified two problem areas of particular importance. First, there exists a myriad of definitional problems which must be sorted before sophisticated research designs can be used. While this problem is not unique to nursing programs, it is imperative that the matter be resolved so a common base for discussion can be built. Second, the matter of who should provide input into curricular decisions was found to be another critical factor. For example, because of the nature of vocational education, vocational educators utilize advisory committees extensively. Advisory committee members consist of consumers, employers, supervisors of program

graduates, program graduates and students of the program.

Presently, the employer is in the advantageous position of impacting on the quality of health and nursing care now and in the future. The employer is in the position of hiring persons to perform various nursing functions; therefore, also deciding which level of nurse perform certain job functions. Thus it seems reasonable to consider seriously the employers' perceptions of educational requirements if program graduates are to be prepared for successful job performance, as well as affecting quality nursing care.

It is hoped that you will find this document useful. We realize that more intensive study in this area is imperative. Hopefully, others will use this study as a basis for further research and will continue the efforts initiated here. Please share with us the results of any research you may have pertaining to nurse educational programs.

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PRACTICAL NURSE EDUCATORS

Proposed Resolution

As a result of "A Study of the Status and Viability of Licensed Practical Nursing Programs in the State of Minnesota", we, the Practical Nurse Educators of Minnesota, recommend the following proposed resolution:

WHEREAS: we recognize and support the need for improved professional nursing education; and

WHEREAS: those hiring and directing Licensed Practical Nurses hold them in high regard; and

WHEREAS: the majority of the respondents indicate that the LPN role was clearly defined, and that they possess the competencies expected of them at the time they are hired; and

WHEREAS: a large majority of the respondents indicated that they feel the staffing patterns for entry level positions will remain the same in the future for entry level positions; and

WHEREAS: we are concerned about the methodology, assumptions, and process of decision-making and policy formation related to the viability of any nursing education program;

THEREFORE, BE IT RESOLVED THAT we, the Practical Nurse Educators of Minnesota, endorse the continuance of the Licensed Practical Nurse (LPN) to function in the role of the assistant to the professional nurse, and encourage further data collection and further study before any level of nursing program be deleted.

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I. INTRODUCTION

In February, 1977, the Minnesota State Department of Education contracted with Educational Management Services, Inc. (EMS) to study the status and viability of the licensed practical nursing programs in the State of Minnesota. The study was promoted by the Committee on the Future of Practical Nursing (COFOPNE) which is made up of representative LPN program directors and instructors from the Area Vocational-Technical Institutes, Community Colleges and private institutions.

Over the past few years, concern has been expressed by health care practitioners and consumers over the efficacy of existing entry level nursing specialities. In Minnesota, as in many other states, five educational programs produce entry level nurses. The five are nurses aide programs, licensed practical nurse programs, associate degree programs, hospital diploma programs, and baccalaureate degree programs. Graduates of the last three programs can qualify as registered nurses. This study was directed to the concern over the licensed practical nurse program.

LPN programs are now offered in twenty three (23) area vocational-technical institutes, four (4) community colleges, and in one (1) hospital setting. Graduates of these programs enter the work force in hospitals, nursing homes, doctors' offices, industry, public health agencies, the military, and in Federal, State and local civil service.

The Advisory Committee on Nursing Education of the Higher Education Coordinating Board has proposed as state policy, that "by 1980, the statewide ratio of graduates of programs at the different levels of nursing education should be one-third registered nurses with baccalaureate degrees, one-third registered nurses with associate degrees or diplomas, and one-third licensed practical nurses".

A contrary position has been presented by several nursing educators and service representatives that there should be a sharp increase in the number of students graduating from baccalaureate nursing programs, even to the elimination or severe reductions in other programs.

Those who propose a greater number of baccalaureate nurses say they are responding to a number of obvious health care needs that exist in the State. They say that the growing complexity of health care demands a higher level of education, and that expansion of health care into community settings requires a practitioner who does not need direct and regular supervision. They cite State statutes that call for expanded health care programs that bring with them the need for appropriately qualified

nurses. Additionally, the increase in nursing education programs demands that nursing faculties have advanced training.

Focus on the need for baccalaureate and advanced degree nurses tends to obfuscate the need for nurses with less than a baccalaureate degree; particularly licensed practical nurses. The problem is many faceted. Caught in the need for advanced nursing skills, health care administrators and nursing supervisors could employ nurses with less than a baccalaureate degree, and could utilize them beyond their level of competency. This may happen even when the health care need is misperceived. In a related sense, baccalaureate nurses could be employed in positions where the job responsibilities do not warrant such placement, but the facility is fulfilling a real or perceived quota.

Focus on the baccalaureate nurse obviously affects the utilization of licensed practical nurses, associate degree nurses, and diploma nurses. If health care administrators and nursing supervisors perceive the LPN as a short step away from the associate degree nurse, placement and responsibility of job assignment may not reflect the differences in the recognized competencies of LPN's and ADN's. Accordingly, job descriptions and personnel utilization may be skewed toward either end of the training continuum.

Ideally, nurses should be clearly differentiated from each other, both in terms of competencies, and in terms of job responsibilities.

DISTINCTIONS BETWEEN NURSES

The Minnesota Higher Education Coordinating Board in March, 1977 attempted to differentiate among the various nursing levels. In their report titled "Planning and Cocrdination of Nursing Education in Minnesota, 1976-1977", they presented the following statement.

> "Though all nurses are given preparation in basic technical nursing skills, the theoretical and basic science foundations are substantially different in the programs at the different levels, and the educational outcomes are reflected in the types of services that nurses are prepared to deliver, the kinds of clients they are prepared to serve, the amount of independence with which they can work, and the educational and supervisory roles they may be called upon to fill.
>
> For example, a nursing assistant helps the patient in activities of daily living, and is trained in some selected common nursing skills. A practical nurse has a range of technical nursing skills that are most appropriately carried out under the direction of a registered nurse but may be performed with or without assistance or direct supervision,

according to the complexity of the situation. The associate degree and diploma nurses function with greater independence and in more complex situations, but still to a lesser degree than the baccalaureate nurse, whose more extensive theoretical background provides a basis for making judgments in nursing situations that are unfamiliar or where outcomes are not easily predictable, and where community and public health concepts are applicable. Highly complex nursing judgments and functions are more appropriately carried out by a nurse with master's preparation.

Some important aspects of a nurse's competence reflect personal aptitude and working experience as well as educational preparation. The level of educational preparation, however, is a very significant factor in a nurse's growth potential and long-range professional achievement or advancement."

Although at first glance these distinctions appear relatively clear, in actual practice, it is frequently impossible to distinguish among the practitioners. The following tasks were some that the study team was able to identify to differentiate between a licensed practical nurse and a registered nurse. In some cases, even these distinctions did not hold as interviews revealed that LPNs were performing tasks that they were neither trained nor licensed to perform. The general concensus was, however, that an LPN could not, but an RN could, perform the following tasks:

1. Assignment of a leadership role such as a charge nurse.
2. Insertion of intravenous needles or the administration of medications through intravenous tubing.
3. Drawing of blood or the administration of blood transfusions.

Because of the complexity of nursing care, it seemed inappropriate to differentiate between two groups of nurses on the basis of three tasks which could, in many cases, be taught to any of them. The study team next turned their attention to legal definitions.

Chapter 148 of the Minnesota Statutes contains differentiations between licensed practical nurses and registered nurses. These statutes are as follows.

148.29 (3) "Licensed Practical Nurse," abbreviated L.P.N., means a person licensed by the board to practice practical nursing.

(4) Practical nursing shall mean the performance for compensation of any of those services in observing and caring for the ill, injured, or infirm, in applying counsel and procedure to safeguard life

and health, in administering treatment prescribed by a licensed health professional, or treatment and medication prescribed by a licensed doctor of medicine, osteopathy, or dentistry, or a licensed podiatrist, which are commonly performed by licensed practical nurses and which require specialized knowledge and skill such as are taught or acquired in an approved school of practical nursing, but which do not require the specialized education, knowledge and skill of a registered nurse. This shall not be construed to prevent the care of any ill, injured or infirm person by any member of his family or any friend, or his care by any person employed primarily as a companion, housekeeper, domestic servant, nursemaid or home health aide.

148.71 (2) The term "Registered Nurse" abbreviated R.N., shall mean a natural person licensed by the Minnesota Board of Nursing to practice professional nursing.

(3) The practice of professional nursing means the performance for compensation or personal profit of the professional interpersonal service of: (a) providing a nursing assessment of the actual or potential health needs of individuals, families, or communities; (b) providing nursing care supportive to or restorative of life by functions such as skilled ministration of nursing care, supervising and teaching nursing personnel, health teaching and counseling, case finding and referral to other health resources; and (c) evaluating these actions.

The practice of professional nursing includes both independent nursing functions and delegated medical functions, which may be performed in collaboration with other health team members, or may be delegated by the professional nurse to other nursing personnel. Independent nursing functions may also be performed autonomously. The practice of professional nursing requires that level of special education, knowledge, and skill ordinarily expected of an individual who has completed an approved professional nursing education program as described in section 148.211, subdivision 1.

CURRENT STATUS OF NURSING

EMS found that at this time, there is a great deal of misunderstanding, misinformation, fear, and uncertainty that surrounds the status and viability of virtually all nurse practitioner positions. During the course of the study, the following items tended to receive repeated concern.

New York State Nurses Association "1985 Proposal". In October

of 1975, the voting body of the NYSNA passed a legislative proposal to implement the 1974 Resolution on Entry Intro Professional Practice through Revision of Article 139, Nursing, Title VIII, Education Law (the Nurse Practice Act.)

The intent of this proposal, known as the "1985 Proposal", was to clarify, standardize, and elevate the educational requirements for the legal practice of nursing by professional and practical nursing. Professional nurses are those now known as registered nurses whose preparation was through an associate degree, hospital diploma, or baccalaureate degree program. The title of practical nurse remains the same but different educational requirements are proposed.

The "1985 Proposal" stipulated that all professional nurses must have a baccalaureate degree and all practical nurses should have an associate degree. It provides for two careers in nursing, each with its own distinct and standardized educational requirements. Because the bill would eliminate all nursing programs less than those for which an associate degree were granted, it has caused a tremendous amount of concern within the educational community, especially among vocational-technical institutes.

Minnesota Nurses Association Position Paper. Of immediate concern to this study is the proposed position of the Minnesota Nurses Association. This position, expressed in a paper prepared by a MNA task force and approved by the Board of Directors, recognizes two systems of education as providing entry level personnel to three newly-designated characterizations of nursing care. The paper states that one-year programs, such as those now provided to licensed practical nurses, are inadequate for first level nursing practice, and suggest instead that two-year associate degree graduates fill those positions. This is essentially what is suggested in the New York report. The paper further states that baccalaureate nurses be selected to fill advanced levels of nursing. Although the diploma nurse has more training than the associate degree nurse, these programs would be eliminated since the paper states that all nursing education must take place in an educational institution.

Both of these position papers will be discussed in greater detail in Chapter IV, Discussion.

Clearly, there were no precise definitions to turn to. If health care is defined as requiring more training than is now provided, the descriptions of the nurse practitioners will point out where discrepancies exist. These discrepancies will in turn help to define the educational requirements that must be met. It was learned early in the study, however, that health care can be defined in many ways, particularly as it serves the needs of those who are to provide it. This multiple approach to defining health care reflects in part the current status of nursing.

STATEMENT OF THE PROBLEM

The Committee on the Future of Practical Nursing Education (CFPNE) has a sincere interest in the concern over entry level nursing specialties. Any attempt to truncate the list of five entry level nursing programs will unquestionably affect all of them. If one or more are selected for combination or elimination, the burden of producing essential nursing personnel will fall upon the remaining programs.

Of more critical importance is the manner in which a decision about the retention or elimination of nursing programs is made. The provision of qualified nursing personnel to serve the broad range of health care needs must be based upon valid and relevant data. Those who direct nursing programs do so on the assumption that they are filling an expressed need. The assumptions cannot be ruled invalid until the needs are reassessed. The critical needs are those expressed by health care consumers and interpreted by administrators and nursing supervisors. From another perspective, the professional nursing associations are concerned that the competencies of their members are matched to current and anticipated needs, and that these competencies are translated into precise educational objectives.

Before the future of practical nursing education can be charted, assessment must be made of its current status in the total array of nursing care.

PROJECT OBJECTIVES

The primary objective of this study was to determine the status and viability of licensed practical nursing education programs in the State of Minnesota.

Associated with the primary objective were the following process objectives:

1) Document recognized competencies of LPN graduates as expressed by program directors and faculty.

2) Document employment competencies of LPN graduates as perceived by nursing supervisors and health care administrators.

3) Document formalized competencies as revealed in job descriptions for LPN graduates.

4) Document actual on-the-job performance competencies as reported by LPNs.

5) Document discrepancies between expected and actual competencies as determined in 1 - 4 above.

6) Document differences in competencies of LPN's and associate degree nurses as perceived by program directors and faculty, nursing supervisors and health care administrators, and practicing LPN's and ADN's.

This study sought to find answers to the following questions:

1) Does there exist a clear perception of a cluster of health care requirements that can best be met through utilization of the competencies of licensed practical nurses?

2) Are the competencies of licensed practical nurses clearly perceived?

3) Are the differentiations between competencies of the five entry level nursing specialities clearly perceived?

Primary focus of the study was directed toward the licensed practical nurse. Of almost equal concern, however, were the associate degree nurses. Both the New York and Minnesota position papers imply that an associate degree nurse could displace licensed practical nurses. In trying to determine the status and viability of the LPN, therefore, the positions had to be analyzed and compared with other nurse practitioners. The study did not intend to come up with recommendations supporting one over the other. The data that was obtained was directed toward the project objectives and the questions they posed.

Although the study focused on the status and viability of LPN instructional programs in the State of Minnesota, it is apparent that what happens in other states has a significant impact on what happens here.

OUTLINE OF THE REPORT

Chapter II, which follows, contains a detailed description of the methodology that was followed in gathering data for this study. The first part of the chapter discusses the development of the questionnaire that was administered to respondents across the entire State of Minnesota. A copy of the questionnaire is included in the appendix. The methodology used in conducting personal interviews is also discussed. The interview document is also included in the appendix.

Chapter III describes the results of the study both in narrative and graphic form. The questionnaire results are presented first, followed by the results of the interviews.

Chapter IV contains a discussion of the results as perceived by the EMS staff who participated in the study. Since the study was concerned only with analysis and assessment, no recommendations were presented.

Chapter V serves as a summary of the project.

The appendix contains selected materials that were used or had an impact on the conduct and results of the study.

II. METHODOLOGY

In order to assess the current status and viability of practical nursing education in the State of Minnesota, EMS sought to obtain data from a variety of individuals and sources. Three methods of gathering data were used; basic "library" research of appropriate documents, interviews with selected respondents, and responses to mail questionnaires.

Using Exhibit II.1 on the following page, data were gathered from a variety of health care practitioners from each of seven State regions. It was not intended that responses would be gathered from each cell in the matrix. There was neither the time nor the resources to get such coverage. It was hoped that as many different kinds of people as possible could be contacted to provide a broad range of responses.

QUESTIONNAIRE

The document "Practical Nurse Competencies" served as the basis for developing the questionnaire. This document was developed by the faculty and submitted by the directors of all practical nurse programs in the State. The first draft was printed by the Minnesota Department of Education and made available to the EMS staff. A similar list of competencies was obtained for associate degree nurses. It too was developed by program directors and faculty.

The competencies that are described in these two documents are intended to reflect the specific knowledge, skills, and attitudes that graduates of the two programs possess at the time they complete their formal training and enter the nursing profession.

In developing the questionnaire, EMS sought items that would either be difficult to ascribe to one of four nurse practitioners, or it would be clearly identified as being the responsibility of at least one group. Members of the Committee on the Future of Practical Nursing Education identified a number of items about which there could be a difference of opinion as to whose skill it was. EMS staff added other items from the list of associate degree competencies. The final version of the questionnaire contained four types of items as described below:

1. Items that were taken verbatim from the Licensed Practical Nurse list of competencies.

2. Items that were taken from the LPN competency list that were only slightly altered by word change or

EXHIBIT II.1

SAMPLE SELECTION TABLE

LIST OF POTENTIAL RESPONDENTS	REGIONS OF THE STATE						
	Northwest	Northeast	West Central	Central	Southwest	Southeast	Metropolitan
1. Current LPN Students							
2. LPN Program Directors and Faculty							
3. Recent LPN Graduates							
4. Employed LPNs							
5. LPN Nurse Supervisors							
6. Health Care Administrators							
7. Members of Professional Associations							
8. Practicing Physicians							
9. Lay Members of the General Public							
10. ADN Program Directors and Faculty							

addition but which did not significantly change the content.

3. Items that appeared in both the LPN and Associate Degree competencies that reflected tasks that either practitioner could perform.

4. Items that appeared only on the Associate Degree list of competencies.

None of the items in the questionnaire were validated prior to their use. EMS felt that since a great deal of time and effort had been spent in developing them by faculty and program directors, they must have some validity in real practice. In many cases, the statement was used to attempt to elicit comparative responses, so that different respondents could have differing views as to authenticity or validity.

The development of the questionnaire is explained in detail in Appendix A. Where appropriate, the questionnaire item is preceded by the statement of LPN or AD competency. All of the items were either taken directly from the competency lists or were developed from them.

Using the list of LPN competencies, or the AD competencies, to develop questionnaire items was very difficult. As laypeople, the EMS staff expected to find clear, concise statements of what a nurse practitioner can do, and hopefully, what they cannot do. For example, the following competency statement was selected by the Committee on the Future of Licensed Practical Nursing as one which should be included in the questionnaire.

"Identifies needs and problems".

This statement was listed as a nursing process skill, and the knowledge behind that skill was stated as follows:

"Recalls basic needs and nursing measures used to meet these needs".

EMS staff changed the skill statement to read "Identifies patient's needs and problems and initiates nursing care plans". It was felt that the original statement was too vague and left no assumption of what must be done after needs were identified.

The list of AD competencies were equally vague. A statement would be made of the knowledge the nurse must have, and then a list of skills were presented that carried that knowledge into practice. An example of a knowledge statement related to nursing care skills and delegated medical functions is presented below.

"Understands principles of medical and surgical asepsis and applies these in simple and complex

nursing situations and can transfer this knowledge and adapt techniques to some highly complex nursing situations".

Associated with this statement of knowledge are the following skills:

Medical Asepsis

Handwashing and isolation technique

Surgical Asepsis

Gloving
Dressing changes
Handling of transfer forceps
Catheterization
Irrigations

EMS combined aspects of this AD competency with an LPN competency to create this questionnaire item: "Uses appropriate techniques such as irrigation when caring for patients with wounds".

Throughout the study, the EMS project team sought to find some means of differentiating between the nurse practitioners. Ideally, a unique segment of health care could be identified along with the steps needed to provide that care. These steps would then be assigned to specific nurse practitioners. Steps that should not be undertaken by one or more nurses would also be identified.

The closest the project team came to this condition involved the provision of intravenous medication. Initially, the study team members were led to believe that LPNs were limited in their involvement with intravenous treatments as evidenced by their statement of competency.

"Monitors flow of intravenous fluids according to doctor's orders and observes the intravenous site for complications".

Under no conditions, it was suggested, should an LPN position the intravenous needle or control the flow. This control was not stated as fact in any document or job description, nor was there a clear statement of the steps involved in intravenous treatment and who should perform them. Extracting from both lists of competencies, EMS developed the following questionnaire statement.

"Maintains intravenous therapy by changing bottles, tubing, or dressing, by regulating the rate of administration, or by discontinuing the flow".

The questionnaires were distributed in two ways. During interviews, questionnaires were left with the respondent who was asked to complete one and to distribute others to their colleagues in the health care facility. This "shotgun" approach proved to be fairly effective and the response, though not documented, appeared good.

The second approach involved mailing the questionnaires to the list of directors of nursing that was provided to us. Every director who was not otherwise interviewed was sent a questionnaire. The response to these mailings were also quite good.

During the course of the study, two conditions surfaced. First, it was obvious that the statements on the questionnaires did not discriminate clearly. No attempt was made to reword them, because the stated list of competencies from which they were developed was just as nebulous. Secondly, because of the success of the interviews and the willingness of respondents to express their feelings, less reliance was placed on the questionnaires. Accordingly, fewer were distributed than was originally planned.

Upon completion of the questionnaire, the respondents were to identify themselves in two ways. They were first to identify the position they held. The eight categories included current LPN student, LPN program director/faculty, employed LPN, staff nurse, head nurse, health care administrator, ADN program director/faculty, and other. Those who identified themselves as directors of nursing were established in a ninth category.

The respondents were also asked to identify the program they completed as follows: nursing assistant, licensed practical nurse, associate degree nurse, diploma program, baccalaureate nurse program, and master's degree program. Because of the number of diploma nurses who responded, they were divided into three groups, the additional categories being diploma and associate degree, and diploma and baccalaureate degree.

EMS sorted the questionnaires into those from metropolitan areas and those coming from outstate. A third group of non-designated was also established.

INTERVIEWS

The interviews were directed toward nursing directors, hospital administrators, or others who are responsible for hiring and/or directing nurses. The major thrust of the interview session was to elicit feelings from the respondent of the usefulness, preparation, and acceptance of the licensed practical nurse and other entry level people.

Job descriptions were obtained whenever possible to assess whether actual job performance and expectation correlated with formal job descriptions.

The items used in the interview form were developed by EMS to elicit responses that would meet the objectives of the study. It was anticipated that the interviewees would provide additional information beyond that which was called for. To the extent that this occured, the interviews became open-ended. Comments were encouraged, and in many instances, essential data was provided that was not elicited by an item from the interview form.

The interview form is contained in Appendix B.

LIBRARY RESEARCH

EMS staff surveyed the literature for material related to studies of the status and viability of nursing positions. The materials which were utilized are listed in the bibliography. College catalogs were examined to attempt to document differences within and among the various training programs.

III. RESULTS

EMS tried to establish clear-cut distinctions between and among the various nurse practitioners. Of prime concern was the distinction between practical nurses and associate degree nurses. Those two programs are the closest together in terms of requirements. The practical nurse program generally takes ten calendar months, and the associate degree program takes eighteen, or the equivalent of two academic years. At the same time, the licensing of the two is quite different. The ten-month graduate can, if successful, become a licensed practical nurse. The associate degree graduate can, in contrast, become a registered nurse.

EMS felt that a clear understanding of the differences between the various practitioners would help to clarify the status of the licensed practical nurse.

CHARACTERISTICS OF QUESTIONNAIRE RESPONDENTS

A total of 118 questionnaires were received and analyzed. When a response to an item was missing, only the remaining responses were calculated in the percentages. Exhibit III.1 on the following page reveals the distribution of questionnaire respondents according to the information that was provided on the last page of the form.

Over half of the respondents completed a diploma program with some getting an associate degree or baccalaureate degree in addition. According to the positions they held, health care administrators and directors of nursing accounted for the largest number. Over two-thirds of the respondents were located outside of the metropolitan area. The largest single group of respondents appeared to be outstate directors of nursing who had completed the diploma program.

The study sought to obtain responses from those who were most likely to affect the employment and utilization of licensed practical nurses. With the large number of directors of nursing and health care administrators responding, it appears as though that objective was met.

A total of 108 interviews were conducted throughout the state. Exhibit III.2 displays the distribution of respondents by position, type of facility, and region of the state. Combining responses from questionnaires and interviews, every region of the state was represented. Total respondents consisted of 83 from the metropolitan area and 133 from outstate.

EXHIBIT III.1

DISTRIBUTION OF QUESTIONNAIRE RESPONDENTS
BY POSITION, PROGRAM, AND REGION

	POSITION							REGION		
PROGRAM	LPN	Staff Nurse	Head Nurse	Health Care Admin.	Dir. of Nurs.	Other	Total	Metro	Out-State	Un-Desig.
LPN	6 5.1%	-	-	-	1 0.8%	-	7 5.9%	2 1.7%	5 4.2%	- -
ADN	-	3 2.5%	-	1 0.8%	1 0.8%	-	5 4.2%	2 1.7%	3 2.5%	- -
DIP	-	2 1.7%	12 10.2%	19 16.1%	23 19.5%	3 2.5%	59 50.0%	18 15.3%	37 31.4%	4 3.4%
BD	-	2 1.7%	1 0.8%	3 2.5%	8 6.8%	2 1.7%	16 13.6%	2 1.7%	13 11.0%	1 0.8%
MA	-	-	-	5 4.2%	2 1.7%	1 0.8%	8 6.8%	2 1.7%	3 2.5%	3 2.5%
DIP + AD	-	1 0.8%	-	-	-	-	1 0.8%	-	-	1 0.8%
DIP + BD	-	1 0.8%	1 0.8%	3 2.5%	3 2.5%	2 1.7%	10 8.5%	4 3.4%	5 4.2%	1 0.8%
OTHER	-	-	-	2 1.7%	-	-	2 1.7%	1 0.8%	1 0.8%	- -
SUBTOTAL	6	9	14	33	38	8	108	31	67	10
MISSING PROGRAM	-	1 0.8%	1 0.8%	4 3.4%	4 3.4%	-	10 8.5%	9 7.6%	1 0.8%	- -
TOTAL	6 5.1%	10 8.5%	15 12.7%	37 31.4%	42 35.6%	8 6.8%	118	40	68	10
REGION										
METRO	2 1.7%	5 4.2%	6 5.1%	12 10.2%	12 10.2%	3 2.5%	40 33.9%			
OUTSTATE	4 3.4%	3 2.5%	9 7.6%	22 18.6%	27 22.9%	3 2.5%	68 57.6%			
UNDESIG.	-	2 1.7%	-	3 2.5%	3 2.5%	2 1.7%	10 8.5%			

EXHIBIT III.2

DISTRIBUTION OF INTERVIEW RESPONDENTS
BY POSITION, FACILITY, AND REGION

POSITION	HOSPITAL		NURSING HOME		TOTALS
	METRO	OUTSTATE	METRO	OUTSTATE	
Director of Nursing	8 7.4%	20 18.5%	7 6.5%	9 8.3%	44 40.7%
Assistant Director of Nursing	2 1.9%	5 4.6%	-	-	7 6.5%
Supervisor of Nurses	-	1 0.9%	-	-	1 0.9%
Staff Nurse	9 8.3%	10 9.3%	6 5.6%	5 4.6%	30 27.8%
Head Nurse	3 2.8%	6 5.6%	-	-	9 8.3%
Licensed Practical Nurse	-	1 0.9%	-	-	1 0.9%
Administrator	6 5.6%	6 5.6%	2 1.9%	2 1.9%	16 14.8%
GRAND TOTAL	28 25.9	49 45.4	15 13.9	16 14.8	108 100.0%
TOTAL HOSPITAL	28	49	-	-	77
TOTAL NURSING HOME	-	-	15	16	31
TOTAL METRO	28	-	15	-	43
TOTAL OUTSTATE	-	49	-	16	65

QUESTIONNAIRE RESULTS

The summary of questionnaire responses in Exhibit III.3 reveals that the overwhelming majority of respondents feel that the licensed practical nurse can perform all of the skills that were listed. The responses did not follow any pattern for one or another group of respondents. The greatest number of responses indicating the licensed practical nurse came from outstate directors of nursing who were diploma graduates.

Since there was no questionnaire response category for diploma nurses, respondents who were diploma graduates were required to select either nurses with more, or less, formal training than they themselves had. In choosing those with less, they could either select a registered nurse like themselves (the associate degree nurse), or a licensed practical nurse. The investigators found that there is a difference of opinion between diploma nurses and baccalaureate nurses as to which practitioner has the most training. The argument centers on the contention that practical clinical skill training is more, or less, intense than formal, theoretical classroom training. In any case, the respondents who identified themselves as diploma graduates with no additional training, generally identified the licensed practical nurse as being capable of performing the skills described in the questionnaire statements.

QUESTIONNAIRE RESPONSE PREFERENCES

There were no nursing assistants who completed the questionnaire. There were, however, 7 licensed practical nurses, 5 associate degree nurses, and 16 baccalaureate nurses who did respond. The majority in each case picked LPN as the appropriate response category. Some of the licensed practical nurses chose the NA response for 7 items and ADN for 8 items, but in no case did they select BDN. Associate degree nurses, in contract, chose, to some degree, NA for 13 items, LPN for 38 out of 39 items, and their own ADN for 27 items, which was 3 times more than the associate degree choices. Finally, some baccalaureate nurses chose NA for 2 items, LPN for 38 items, ADN for 26 items, and their own BDN for 22 items. The results indicate that there was some preference for one's own group as the appropriate response category.

EXHIBIT III.3

PERCENTAGE OF RESPONDENTS WHO INDICATED APPROPRIATE PRACTITIONER QUALIFIED TO PERFORM STATED SKILLS AT THE TIME OF INITIAL JOB PLACEMENT

1.	Teaches the importance of proper nutrition and explains the modification of special diets.	NA 0.9%	*LPN 50.9%	ADN 29.2%	BDN 18.9%
2.	Adapts nursing measures to meet basic needs of patients at all stages of growth and development.	NA 0.9%	*LPN 67.6%	ADN 19.8%	BDN 11.7%
3.	Administers basic supportive nursing care to the semi-conscious and unconscious patient.	NA 3.4%	*LPN 91.5%	ADN 5.1%	BDN -
4.	Operates circo-lectric bed, Stryker frame, or patient lifters when lifting or moving patients.	NA 5.5%	LPN 88.1%	*ADN 5.5%	BDN 0.9%
5.	Admits patients.	NA 5.1%	*LPN 90.6%	*ADN 3.4%	BDN 0.9%
6.	Observes common signs and symptoms of oxygen insufficiency, and initiates appropriate action, such as application of an oxygen mask, insertion of a cannula, or use of a humidifier.	NA 1.7%	LPN 77.4%	*ADN 18.3%	BDN 2.6%
7.	Observes, records, and reports patient's acceptance and/or tolerance of diet.	NA 10.2%	*LPN 89.8%	ADN -	BDN -
8.	Adapts basic nursing care to meet special needs of sensory-deprived and mentally-handicapped individuals.	NA 2.7%	*LPN 73.5%	ADN 15.9%	BDN 8.0%
9.	Gathers data from chart references, books, patient, and family, and team conferences to use in preparing a nursing care plan.	NA 0.9%	LPN 59.6%	*ADN 34.2%	BDN 5.3%
10.	Observes signs of anxiety; verbal and non-verbal.	NA 5.1%	*LPN 92.3%	ADN 0.9%	BDN 1.7%
11.	Identifies, records, and reports early common signs of tissue anoxia, edema, or breakdown; infection contractures and deformities.	NA 1.8%	*LPN 85.1%	ADN 10.5%	BDN 2.6%

* = Practitioner EMS staff hypothesized would be selected.

EXHIBIT III.3
(Cont)
PERCENTAGE OF RESPONDENTS WHO INDICATED APPROPRIATE PRACTITIONER QUALIFIED TO PERFORM STATED SKILLS AT THE TIME OF INITIAL JOB PLACEMENT

12.	Identifies patients' needs and problems and initiates nursing care plans.	NA 1.8%	*LPN 61.8%	*ADN 30.9%	BDN 5.5%
13.	Identifies, records, and reports signs of shock or hypertension.	NA 1.7%	*LPN 86.2%	ADN 11.2%	BDN 0.9%
14.	Maintains intravenous therapy by changing bottles, tubing, or dressing, by regulating the rate of administration, or by discontinuing the flow.	NA -	LPN 61.5%	*ADN 37.6%	BDN 0.9%
15.	Implements prescribed therapeutic activity such as dangling, ambulating, passive range of motion, etc.	NA 5.1%	*LPN 90.7%	ADN 3.4%	BDN 0.8%
16.	Observes the effectiveness of, or reaction to respiratory therapy.	NA -	*LPN 75.9%	ADN 20.5%	BDN 3.6%
17.	Identifies and reports obvious signs and symptoms of elimination problems.	NA 12.7%	*LPN 87.3%	ADN -	BDN -
18.	Observes for and identifies therapeutic and side effects of medications.	NA -	*LPN 88.0%	ADN 10.3%	BDN 1.7%
19.	Records and reports emotional responses.	NA 4.3%	*LPN 92.2%	ADN 2.6%	BDN 0.9%
20.	Correctly turns, positions, and supports patients.	NA 15.4%	*LPN 84.6%	ADN -	BDN -
21.	Monitors flow of intravenous fluids according to doctor's orders and observes the intravenous site for complications.	NA -	*LPN 80.4%	ADN 18.8%	BDN 0.9%
22.	Evaluates and updates care plans and goals.	NA 2.6%	*LPN 61.7%	* ADN 30.4%	BDN 5.2%
23.	Utilizes appropriate resources to determine dosage, action, and side effects of drugs.	NA -	*LPN 71.3%	ADN 23.5%	BDN 5.2%

* = Practitioner EMS staff hypothesized would be selected.

EXHIBIT III.3
(Cont)
PERCENTAGE OF RESPONDENTS WHO INDICATED APPROPRIATE PRACTITIONER QUALIFIED TO PERFORM STATED SKILLS AT THE TIME OF INITIAL JOB PLACEMENT

24.	Evaluates adequacy of functioning of nasogastric tubes, and proper positioning to promote drainage and prevent trauma.	NA -	*LPN 73.6%	ADN 23.6%	BDN 2.7%
25.	Appraises, records, and reports patient's response to nursing care.	NA 4.3%	*LPN 86.2%	ADN 6.9%	BDN 2.6%
26.	Supports mental health through the establishment of positive interpersonal relationship.	NA 1.8%	*LPN 84.2%	ADN 8.8%	BDN 5.3%
27.	Prepares and safely administers medications, such as eye, ear, and nose drops.	NA 0.9%	*LPN 94.8%	*ADN 4.3%	BDN -
28.	Observes, measures, records, and reports adequate, inadequate or excessive fluid intake.	NA 12.0%	*LPN 85.5%	ADN 2.6%	BDN -
29.	Participates in reality orientation measures.	NA 7.1%	*LPN 83.9%	ADN 7.1%	BDN 1.8%
30.	Identifies, records, and reports symptoms of circulatory deficiency and performs prescribed therapeutic measures as necessary.	NA 0.9%	*LPN 68.5%	ADN 24.1%	BDN 6.5%
31.	Evaluates own performance in nursing situations.	NA 6.3%	*LPN 82.9%	ADN 8.1%	BDN 2.7%
32.	Uses appropriate techniques such as irrigation when caring for patients with wounds.	NA -	LPN 82.9%	*ADN 14.4%	BDN 2.7%
33.	Supports patients through stages of adjustment to death and dying such as denial, anger, bargaining, depression, and acceptance.	NA 4.5%	*LPN 76.8%	ADN 10.7%	BDN 8.0%
34.	Cares for patients in traction and with casts, observing principles of safety, body positioning, and exercise.	NA 0.9%	*LPN 95.7%	ADN 2.6%	BDN 0.9%

* = Practitioner EMS staff hypothesized would be selected.

EXHIBIT III.3
(Cont)
PERCENTAGE OF RESPONDENTS WHO INDICATED APPROPRIATE PRACTITIONER QUALIFIED TO PERFORM STATED SKILLS AT THE TIME OF INITIAL JOB PLACEMENT

35.	Discharges patients.	NA 10.4%	*LPN 81.7%	*ADN 7.0%	BDN 0.9%
36.	Evaluates effects of communications on co-workers and patients.	NA 1.9%	*LPN 69.8%	ADN 17.9%	BDN 10.4%
37.	Maintains proper techniques for patients on isolation both for the patient's protection, as well as for other patients and personnel.	NA 3.4%	*LPN 89.7%	ADN 6.0%	BDN 0.9%
38.	Administers common nursing procedures related to elimination such as administering enemas, rectal suppositories, colostomy or catheter irrigation, and catheterization.	NA 4.3%	*LPN 94.9%	*ADN 0.9%	BDN -
39.	Employs nursing measures to relieve pain or discomfort, (e.g., back rubs, position change, and diversion, etc.)	NA 13.8%	*LPN 85.3%	ADN 0.9%	BDN -

INTERPRETATION OF QUESTIONNAIRE RESPONSES

In some cases respondents indicated that more than one practitioner could perform the skill. EMS assumed that a hierarchy of sorts existed among the choices. That is, if a licensed practical nurse could perform a skill, so also could an associate degree nurse and a baccalaureate degree nurse. The information that was being sought was an indication of the first person on the hierarchy that could perform the skill, assuming again that those beyond that position could also perform the skill.

The response data that is displayed in Exhibit III.3 indicates for each nurse practitioner, the percent of respondents who felt that practitioner could perform the skill described in the statement. It is the respondent's choice of the first person in the assumed hierarchy that is reported.

In Item #1, for example, 0.9% felt that at least the nursing assistant could perform the skill, 50.9% felt the licensed practical nurse was the first person qualified to do so, 29.2% selected the associate degree nurse, and 18.9% selected the baccalaureate degree nurse. It can be safely assumed that those who selected nursing assistant, licensed practical nurse, and associate degree nurse would also have selected baccalaureate nurse.

In short, the selection of one of the practitioners assumes the selection of those above it in the hierarchy, and the rejection of those below it. The respondents are indicating who among the hierarchy is the first acceptable one to perform the skill.

SUMMARY OF QUESTIONNAIRE RESULTS

For every item in the questionnaire, the majority of respondents picked the LPN as the practitioner who could perform the stated skill at the time of initial employment. For those items that were taken verbatim from the list of LPN competencies, 100% of the respondents should have selected the LPN if the list was valid and uniformly understood and accepted. The degree to which the LPN was not unanimously chosen provides a measure of the extent to which the statement is rejected as an LPN competency. In contrast for those items which neared a 100% choice of LPN, it may be said that the competency was correctly stated as that of an LPN.

Exhibit III.7 displays the ten items to which the largest percentage of respondents selected LPN as the acceptable practitioner. Four of the items represent verbatim LPN competencies. Three of the items were only slightly altered from the LPN list of competencies. The three remaining statements were altered in such a way as to reflect either an LPN or an AD competency. The results do not support the hypothesis that the unaltered LPN competency statement would be identified uniformly with the LPN practitioner.

EXHIBIT III. 4

QUESTIONNAIRE ITEMS THAT RECEIVED THE MOST ACCEPTANCE AS LICENSED PRACTICAL NURSE COMPETENCIES

(A)	Cares for patients in traction and with casts, observing principles of safety, body positioning, and exercise.	NA 0.9%	LPN 95.7%	ADN 2.6%	BDN 0.9%
(C)	Administers common nursing procedures related to elimination such as administering enemas, rectal suppositories, colostomy or catheter irrigation, and catheterization.	NA 4.3%	LPN 94.9%	ADN 0.9%	BDN -
(C)	Prepares and safely administers medications, such as eye, ear, and nose drops.	NA 0.9%	LPN 94.8%	ADN 4.3%	BDN -
(A)	Observes signs of anxiety; verbal and non-verbal.	NA 5.1%	LPN 92.3%	ADN 0.9%	BDN 1.7%
(A)	Records and reports emotional responses.	NA 4.3%	LPN 92.2%	ADN 2.6%	BDN 0.9%
(A)	Administers basic supportive nursing care to the semi-conscious and unconscious patient.	NA 3.4%	LPN 91.5%	ADN 5.1%	BDN -
(B)	Implements prescribed therapeutic activity such as dangling, ambulating, passive range of motion, etc.	NA 5.1%	LPN 90.7%	ADN 3.4%	BDN 0.8%
(C)	Admits patients.	NA 5.1%	LPN 90.6%	ADN 3.4%	BDN 0.9%
(B)	Observes, records, and reports patient's acceptance and/or tolerance of diet.	NA 10.2%	LPN 89.8%	ADN -	BDN -
(B)	Maintains proper techniques for patients on isolation both for the patient's protection as well as for other patients and personnel.	NA 3.4%	LPN 89.7%	ADN 6.0%	BDN 0.9%

A = Verbatim statements from list of LPN competencies.
B = Slightly modified statements from list of LPN competencies.
C = Competencies that could be expected of either an LPN or an ADN.
D = Competencies that only an ADN or BDN would possess.

In contrast, Exhibit III.5 lists the ten statements in which the LPN was selected fewer times in preference to the other practitioners. These statements could be considered as those partially rejected as LPN competencies. Since a majority of respondents still selected LPN, they cannot be considered a rejection of the statement as an LPN competency. Four of the items, including the statement for which the fewest number of respondents selected the LPN, were verbatim LPN competency statements. Not surprisingly, three of the statements reflected competencies that could be performed by either an LPN or an AD, and one was considered by EMS as being clearly an AD competency. The remaining two statements were slightly modified from the LPN list of competencies.

It is apparent from the data that those who responded to this questionnaire did not accept the verbatim competency statements as valid for licensed practical nurses. Of the seventeen verbatim competency statements, the average number who selected LPN was 81.5%. Nursing assistant was selected by an average of 4.4%, associate degree nurse was selected by 10.4% and baccalaureate degree nurse by 3.7%.

Surprisingly, there is slightly greater acceptance for LPNs of those competency statements that were slightly modified. The average percentages for these eleven items were 4.2% for nursing assistant, 82.2% for licensed practical nurse, 10.4% for associate degree, and 3.2% for baccalaureate nurse.

Seven statements were worded in such a way that the competency could be attributed to either an LPN or an ADN. The shift toward the potential double choice was reflected in the following average percentages: nursing assistant, 3.7%; licensed practical nurse, 77.9%; associate degree nurse, 15.9%; and baccalaureate nurse, 2.5%.

Four statements appeared in the questionnaire that EMS felt reflected competencies that ADNs could perform, but LPNs should not. The percentage response for these skills are as follows: nursing assistant, 1.8%; licensed practical nurse, 77.5%; associate degree nurse, 18.9%; and baccalaureate degree nurse, 1.8%.

Although the pattern of responses was neither consistent nor conclusive, it did reveal a trend away from the LPN as the statements became altered.

EXHIBIT III.5

QUESTIONNAIRE ITEMS THAT RECEIVED THE LEAST ACCEPTABLE AS LICENSED PRACTICAL NURSE COMPETENCIES

(A)	Teaches the importance of proper nutrition and explains the modification of special diets.	NA 0.9%	LPN 50.9%	ADN 29.2%	BDN 18.9%
(C)	Gathers data from chart references, books, patient, and family, and team conferences to use in preparing a nursing care plan.	NA 0.9%	LPN 59.6%	ADN 34.2%	BDN 5.3%
(D)	Maintains intravenous therapy by changing bottles, tubing, or dressing, by regulating the rate of administration, or by discontinuing the flow.	NA -	LPN 61.5%	ADN 37.6%	BDN 0.9%
(C)	Evaluates and updates care plans and goals.	NA 2.6%	LPN 61.7%	ADN 30.4%	BDN 5.2%
(C)	Identifies patients' needs and problems and initiates nursing care plans.	NA 1.8%	LPN 61.8%	ADN 30.9%	BDN 5.5%
(A)	Adapts nursing measures to meet basic needs of patients at all stages of growth and development.	NA 0.9%	LPN 67.6%	ADN 19.8%	BDN 11.7%
(B)	Identifies, records, and reports symptoms of circulatory deficiency and performs prescribed therapeutic measures as necessary.	NA 0.9%	LPN 68.5%	ADN 24.1%	BDN 6.5%
(B)	Evaluates effects of communications on co-workers and patients.	NA 1.9%	LPN 69.8%	ADN 17.9%	BDN 10.4%
(A)	Utilizes appropriate resources to determine dosage, action, and side effects of drugs.	NA -	LPN 71.3%	ADN 23.5%	BDN 5.2%
(A)	Adapts basic nursing care to meet special needs of sensory-deprived and mentally-handicapped individuals.	NA 2.7%	LPN 73.5%	ADN 15.9%	BDN 8.0%

A = Verbatim statements from list of LPN competencies.
B = Slightly modified statements from list of LPN competencies.
C = Competencies that could be expected of either an LPN or an ADN.
D = Competencies that only an ADN or BDN would possess.

INTERVIEW RESULTS

The interviews revealed that there was significantly less difference between LPNs and RNs relative to the kinds of clients they were prepared to serve, the amount of independence they had in performing their tasks, and the educational and supervisory roles they were called upon to fill.

Many of the perceptions expressed by the respondents are borne out in the data that describes their facility. As Exhibit III.9 shows, the proportion of nursing assistants or aides, licensed practical nurses, and registered nurses varies by facility and location. In nursing homes, particularly those outstate, the majority of practitioners are nursing assistants. Metropolitan nursing homes have a larger percentage of registered nurses than do outstate facilities. In both settings, the diploma nurse is prominent, but there appear to be greater percentages of associate degree and baccalaureate degree nurses in the outstate facilities. This proportionate distribution of registered nurses follows the same pattern for metropolitan and outstate hospitals. Although metropolitan facilities have greater proportions of registered nurses, the distribution of associate degree and baccalaureate degree nurses indicates that there are more of these practitioners outstate.

Exhibit III. 7 reveals respondents' perceptions about staffing patterns and future needs. A large majority of the respondents indicated that they feel the staffing patterns for entry level positions will remain the same in the future for entry level positions. At the same time, an even larger number of respondents feels that the distinctions between entry level positions are not clearly defined. The respondents feel that a nurse's ability to meet health care needs is dependent upon both the training program and clinical experience even though it is difficult to differentiate between the practitioners.

The respondents perceive obvious shortcomings in the competencies of some of the nurse practitioners. These shortcomings are identified in Exhibit III. 8 . By far, the respondents felt that lack of clinical experience was of major concern.

Respondents were asked questions about their perception of the role and viability of the LPN. The vast majority of respondents felt that the LPN role was clearly defined, that they possess the competencies expected of them at the time they are hired, and if the LPN programs were discontinued, serious staffing problems would result. The respondents also listed duties which they felt the LPN should not perform. The skills that were listed correspond to those the investigators obtained from other sources. The more significant tasks which should not be performed by LPNs involved intravenous administrations, developing nursing care plans, drawing blood, administering experimental drugs, and serving as charge nurse during the night hours. In comparison with questionnaire results, it is obvious that these are neither uniformly accepted nor adhered to.

EXHIBIT III.6

NURSING PERSONNEL PROPORTIONS BY TYPE OF FACILITY AND PROGRAM OF STUDY

TYPE OF FACILITY	AIDE	LPN	RN ADN / DIP / BDN
METROPOLITAN			
Nursing Homes	65%	11%	24% 20% / 72% / 8%
Hospitals	22%	24%	72% 24% / 61% / 15%
OUTSTATE			
Nursing Homes	73%	14%	13% 22% / 67% / 11%
Hospitals	22%	20%	58% 33% / 47% / 20%

EXHIBIT III.7

RESPONDENTS' ATTITUDES TOWARD
CURRENT STAFFING PROPORTIONS AND NEEDS

Questions:	Type of Facility				TOTALS
	METRO		OUTSTATE		
	Hospitals/Nursing Homes		Hospitals/Nursing Homes		
Do you try to maintain these same proportions when hiring new staff?					
Yes	17	9	34	6	66
No	11	6	15	10	42
Do you expect the proportions to remain relatively stable over the next few years?					
Yes	13	9	27	7	56
No	15	6	22	9	52
Will staffing patterns needed to meet health care needs in the future remain the same as they are now for entry level positions?					
Yes	21	10	34	10	75
No	7	5	15	6	33
Do you feel a career ladder now exists for Nursing Assistants, LPN's,AD's and BA nurses?					
Yes	11	0	14	4	29
No	17	15	35	12	79
Is a nurse's ability to meet health care needs a factor of the program completed or of clinical experience?					
Program	4	-	8	1	13
Experience	2	2	5	2	11
Both	22	13	36	13	84
Are the distinctions between entry level nursing specialists clearly defined in every instance?					
Yes	5	3	4	2	14
No	23	12	45	14	94

EXHIBIT III.8

RESPONDENTS' ASSESSMENT OF THE COMPETENCIES
DEMONSTRATED BY NURSING SPECIALISTS
AT THE TIME OF EMPLOYMENT

	METRO		OUTSTATE		TOTALS
	Hospital/Nursing Home		Hospital/Nursing Home		
Do you see any obvious shortcomings in the competencies of any of the nursing specialists?					
Yes	26	11	42	15	94
No	2	4	7	1	14
What elements of the nursing profession would you like to see uniformly incorporated in all training programs?					
Clinical Experience	25	13	35	11	84
Patient Assessment	13	3	19	3	38
Geriatrics	3	10	8	8	29
Medications/Pharmocology	10	5	14	3	32
Medical Surgical	8	1	10	2	21
Psychology/Human Relations	11	1	11	1	24
Professionalism/Ethics	3	2	7	-	12

Exhibit III.9 reveals the staffing patterns which the respondents seem to prefer. The vast majority of respondents in either type of facility, whether in the metropolitan area or outstate, prefer a combination of four-year baccalaureate nurses, three-year diploma nurses, and licensed practical nurses.

Finally, Exhibit III.10 reveals the respondents' perceptions of the role and viability of the licensed practical nurses.

SUMMARY OF INTERVIEW RESULTS

In researching position papers and other documentation, the investigators discovered that there is a preference in nursing education toward the baccalaureate and associate degree nurses. This would not have been considered unnatural or significant to this study, except for the affiliated preference toward eliminating the licensed practical nurse as an entry level practitioner. Those who supported the position papers, appeared to be impacting the status and viability of the LPN programs.

Virtually all of the interviews, though they utilized the structured form that is contained in the appendix, allowed the respondents to compare the entry level practitioners. As the number of interviews increased, it became obvious that the data provided by the respondents do not support the contention that the licensed practical nurse programs be phased out in preference to either the baccalaureate or assiciate degree nurse. In fact, the findings, as summarized below, point to the licensed practical nurse as an excellent, and often preferred, entry level practitioner.

The interviews provided a number of conclusive statements about the way the respondents viewed each of the nurse practitioners. The investigators did not attempt to verify the authenticity of the statements, that in itself may warrant another study. What is important, however, is the fact that these perceptions are held by the people who hire and direct the work of several nurse practitioners, including the licensed practical nurse. They are presented here as interview data, not as facts, even though they may all be based on fact. Since selection of entry-level nurses is generally more through consideration of all available personnel, each of the four practitioners considered by this study is discussed below.

Nursing Aides

- They are thought to be essential in outstate nursing homes but many hospital personnel, especially in the metropolitan area felt that their role was diminishing. Several respondents felt that legislation should be enacted requiring certification or licensing of aides.

EXHIBIT III.9

RESPONDENTS' PREFERRED STAFFING PATTERNS FOR
ENTRY LEVEL PRACTITIONERS
CONSIDERING IDEAL STAFFING CONDITIONS

	METRO Hospitals	METRO Nursing Homes	OUTSTATE Hospitals	OUTSTATE Nursing Homes	Total	Percent
Preference						
All 4-year RN	2	-	4	-	6	5.6
*4-year RN's and LPN's	3	3	8	1	15	13.9
4-year RN's and 2-year AD's	4	-	3	-	7	6.5
*4-year and 3-year RN's and LPN's	19	12	32	12	75	69.4
3-year RN's and LPN's	-	-	2	2	4	3.7
LPN's and Aides	-	-	-	1	1	0.9
Total by area:	28	15	49	16	108	

*These two categories could be merged together, given those who named Diploma grads recognized that it is just a matter of time before they are phased out.

FIGURE III.10

RESPONDENTS' PERCEPTIONS OF THE ROLE
AND VIABILITY OF LPN'S

*	METRO Hospitals	METRO Nursing Homes	OUTSTATE Hospitals	OUTSTATE Nursing Homes	TOTAL	PERCENT
Does the LPN have a clearly defined role in the total patient care system?						
Yes	22	5	37	9	73	67.6
No	6	10	12	7	35	32.4
Do LPN's exhibit at the time of entry those competencies expected of LPN's by your institution?						
Yes	23	15	40	15	93	86.1
No	5	-	9	1	15	13.9
If the LPN program were discontinued, would it cause serious staffing problems?						
Yes	19	15	41	15	90	83.3
No	9	0	8	1	18	16.7
What duties may an LPN never perform?						
Intravenous administration	17	4	17	5	43	39.8
Develop Nursing Care Plans	14	7	20	13	54	50.0
Draw Blood	15	8	27	7	57	52.8
Experiential Drugs Administration	21	5	28	15	69	63.9
P.M. Charge	21	4	29	4	58	53.7
A.M. Charge	22	6	30	4	62	57.4
Pass Medications	9	4	23	2	38	35.2
Oxygen Therapy	1	-	-	-	1	0.9

*Multiple answers received, so percentages do not add up to 100%

Licensed Practical Nurses

- Although they do lack some clinical skills, they are seen as having as much or more floor experience than entry level registered nurses.
- Generally, they are looked upon very favorably at the time they are first hired and are considered second only to the diploma nurse in terms of their preparation.
- There are very few nursing functions that a LPN cannot perform although some may require a period of additional training or experience on the job.
- The LPNs may begin to replace the aides in nursing homes and hospitals, especially in metropolitan health care facilities.
- LPNs are quite often over-utilized and given responsibilities that were not developed in their educational program, especially in metropolitan hospitals where there appears to be a shortage of qualified registered nurses. At the same time, there is a trend toward hiring fewer LPNs as more RNs become available.
- Because of cost factors, some hospital or nursing home administrators will hire LPNs and then train them to carry out skills that would otherwise be performed by registered nurses.
- In outstate nursing homes there exist very few distinctions between LPNs and RNs. In outstate hospitals the distinctions are clearer, but there is a heavy reliance on LPNs for many services.
- In metropolitan hospitals, the trend toward "primary care" where one nurse is responsible for the total spectrum of nursing care for a patient, is seen by LPNs and others as a threat to the existence of the LPN.
- Several respondents felt that if the LPN programs could include the skills of patient assessment and decision making, on-the-job training would be shortened, and the LPN would satisfy almost all entry-level needs. With these additional skills, they would be considered by most respondents to be superior to the associate degree nurse.
- It was suggested by some respondents that increasing the LPN program from 10 to 18 months to include assessment skills would satisfy most employment needs.

Associate Degree Nurses

- AD nurses are viewed as being deficient in the skills which nursing directors and hospital administrators expect of them. Most concern is directed toward the lack of clinical skills.

- Nursing home and hospital administrators feel that associate degree nurses need from 6 months to 12 months of additional clinical training before they are acceptable as entry-level registered nurses.

- Several outstate nursing directors and hospital administrators felt that the associate degree program should be discontinued or merged with the LPN program.

- The only benefit seen by many practitioners for continuing the AD programs was the fact that it produces registered nurses which could be hired to meet license and other requirements. Otherwise they see the beginning AD nurse as a liability.

- The lack of sufficient clinical experience in AD graduates causes "reality shock" amongst beginning nurses who discover that they might work in an environment that exists 24 hours a day for seven days each week.

Diploma Nurses

- Diploma nurses were seen as the best qualified of all nurse practitioners.

- Most nursing directors and hospital administrators feel that the clinical skills of the diploma nurse far outweigh the skills of assessment and decision making that are proffered by AD and BA nurses.

- A natural bias exists toward the diploma nurse because most of the nursing directors, staff nurses, and head nurses who were interviewed, were graduates of diploma programs.

Baccalaureate Degree Nurses

- The concern was expressed by several nursing directors that BA nurses revealed a good deal of "reality shock" and showed displeasure at having to work outside of an 8:00-to-5:00, Monday through Friday time period.

- Most interview respondents reported that when compared to other beginning level nurse practitioners, BA nurses showed less than expected clinical skills.

- Some dissatisfaction was reported by BA nurses, to their nursing directors, that they could not step immediately into administrative roles, and that they had to spend time learning clinical skills in which they were judged to be deficient.

- Many nursing directors and hospital administrators displayed ambivalent attitudes toward baccalaureate nurses. They recognized that they must hire qualified registered nurses, and they were pleased to be able to do so. On the other hand, they were disappointed in the overall preparation of BA nurses toward the realities of nursing.

General Observations

- Many hospitals and nursing homes philosophically accept the weaknesses of all program graduates who are entry-level practitioners, and try to compensate for those weaknesses through orientations, buddy systems, and in-service programs.

- Most nursing directors, at the time they are hiring new nurses, look first at clinical nursing skills, and only after a period of time are they concerned with the theory that a nurse knows.

- There is an expressed need for a career ladder, but there is also a need to reaffirm the position of the practitioner who chooses to, or is compelled to reside at the entry level in the hierarchy of nursing care.

- In metropolitan nursing homes, there is a trend to hire LPNs in preference to registered nurses, both because of cost factors and because of the clinical nursing skills which LPNs have.

IV. DISCUSSION

It is not the purpose of the EMS project team to make recommendations for continuance, elimination, or modification of nursing programs. The primary objective of the project was to assess and analyze the conditions which infringe upon the status and viability of licensed practical nurse programs. As lay people, the investigators were not totally familiar with the nature and characteristics of health care delivery. An attempt was made in conducting the study, and in reporting the results, to objectively reflect what was revealed by those now working in the field. To the extent that the findings are not what members of the nursing profession believe to be fact, it may be said that the facts are quite elusive.

The most significant finding of this study is seen as the attempt to define the parameters of health care, and then to declare the special academic programs that would serve those parameters. The impressive parts of this process appear to be that there is little uniformity or agreement on the parameters, that those who establish the parameters and the corresponding programs do not include all nurse practitioners who may be effected by them, and that the recommendations that are made appear to be in conflict with what exists in reality.

It is also interesting to note that the assumptions and givens upon which the parameters are defined, appear to serve particular groups and are not put to test by those who use them.

OVERVIEW OF MNA POSITION PAPER

Because this study was directed specifically toward conditions in Minnesota, careful study was given to the concerns of the Minnesota Nurses Association. Their "proposed position paper on undergraduate nursing education basic for entry into beginning nursing practice in the State of Minnesota" is still in the developmental stages, but the assumptions on which it is based have a significant impact on the findings of this study and on the status and viability of the LPN programs.

The task force which developed the MNA position paper believes that "an educational program of one year in length does not provide sufficient time to produce the practitioner for first level nursing care". This essentially means that the MNA does not accept the LPN programs as they presently exist even though the study data indicate that these graduates are widely accepted and preferred throughout the State by those responsible for hiring and supervision.

The MNA task force also believes that "nursing education must take place in an educational institution" which suggests rejection of the remaining hospital centered diploma programs, the graduates of which appear to be the most sought after entry level practitioners.

The MNA task force suggests two training programs which should provide the entry level practitioners. Associate degree nursing programs, now provided only in State community colleges, would produce "registered nurse associates". The present associate degree program graduates were found to be the least acceptable entry level nurses, and in many instances they were rejected for consideration by those responsible for hiring. The second program would involve baccalaureate preparation and would produce a "registered nurse", as is now the case.

EMS recognizes that the Minnesota Nurses Association position paper is not a statement of educational policy that will be implemented in the immediate future. Nor do the investigators submit that the findings of this study invalidate the assumptions of the MNA. This study does, however, identify several inconsistencies that exist in the perceptions of those who train, employ, and utilize nurse practitioners. These inconsistencies should be critically analyzed and resolved before a definitive statement can be made about the status and viability of licensed practical nursing programs in the State of Minnesota. Because of the interrelationships among the nurse practitioners, one cannot be assessed without studying the problems that confront them all.

PRIMARY, SECONDARY, AND TERTIARY CARE

The MNA position paper made the statement that "nursing practice can be viewed in terms of primary, secondary, and tertiary care". This was one of the assumptions that were "basic to the work of the task force".

These three terms are not, however, uniformly defined or applied. The term "primary" evokes the most concern among nurse practitioners because its application is seen as a threat to LPN programs. As shown below, the term is used in several different ways.

One large Twin Cities metropolitan hospital provided EMS with the following job description for a "primary nurse".

> "One who is responsible for providing total, comprehensive, direct patient care for the patients assigned to her as primary patients. She assumes 24-hour accountability for these patients throughout their stay on the nursing station. She also acts as an associate nurse when providing care and implementing the care plan for a patient in the absence of the primary nurse."

The emphasis here is on total care of the patient both in terms of time, and in the satisfaction of all of the patient's health care needs.

Dr. Robert G. Petersdorf of the University of Washington defines a "primary care physician" in similar terms. According to Dr. Petersdorf, a primary care physician can be defined as

"One who:

a) is the physician of first contact for the patient;

b) makes the initial assessment and attempts to save as many of the patient's problems as possible;

c) coordinates the remainder of the health care team, including ancillary health personnel as well as consultants, that are necessary in dealing with the patient's problem;

d) provides continued contact with the patient and often his or her family;

e) acts as the patient's advisor and confidant; and

f) assumes continued responsibility for his or her care."

Although this definition stresses the continued care approach, it introduces the concept of first, or primary, contact with a patient.

The American Medical Association has a slightly different definition of a primary care physician.

"A physician whom the public generally contacts directly, and whose practice is characterized by a broad scope of medical services including the management of slowly progressive and chronic illnesses, preventive and emergency services, and personal and family counseling."

With a slightly different perspective, the Executive Secretary of the New York State Board of Nursing offers the following definition of "primary nursing"

"... the diagnosis of and problem-related interventions in human responses to health problems as required by people:

1) who represent a health at risk and/or health information-seeking populous.

2) who have a chronic or progressive illness requiring supportive management and periodic evaluation.

3) who have a common and visually simple episodic illness.

4) who require immediate emergency care and referral for care of serious disease and trauma."

There is no discussion in this definition of continuous provision of care which is found in the previous definitions involving the terms primary. First contact is suggested in the consideration of emergency care, but the emphasis seems to be more toward common, basic health care needs.

In another vein, "primary care" definitions are suggested. The first is that offered by the Minnesota Nurses Association.

> "The nursing action that is the basic and life-long point of contact for any given episode of illness or for continuous health-care monitoring. Primary care includes the evaluation of new symptoms, the referral of patient/client to other health care practitioners and community agencies, the long-term management of chronic illness, and direct services that prevent disease and promote and maintain health. Primary nursing care is usually, though not always, rendered in the home, the clinic, or the independent nurse practitioner's office. This nurse reads research and evaluates findings for application in practice. This nurse is also prepared to carry out beginning level research.
>
> Baccalaureate level education is needed to prepare primary care givers ... In addition this graduate should be educated to supervise patient/client's health maintenance, promote their individual welfare, and prevent disease and disability. The graduate should be capable of performing relatively independent assessment of both the normal individual and the one who is experiencing minor (non restructing) pathology."

No specific mention is made in the above definition of point of first contact. Unlike the New York definition, the MNA position is that only practitioners with at least a baccalaureate degree should practice primary care, creating the impression that primary care is more complex somehow. This is offered in spite of the seemingly contradictory statement concerning the places where primary care can be offered.

The Maryland Comprehensive Health Planning Agency proposes definitions for "primary care" and primary health care".

> "Primary care is defined as first contact care, including basic or initial diagnosis and treatment, health

supervision, management of common chronic conditions, and preventive services. The provision of primary care does not visually require highly sophisticated equipment or specialized resources. It is the least expensive type of health care on a per-visit basis. A great majority of people's health problems require primary care services. It is designated 'primary' care not only because it is usually 'first' contact care, but because it is of 'prime' importance. Primary care providers must deal with not only common, 'simple' ailments, but serious and dangerous medical conditions as well, and be knowledgeable as to when a consultation or referral is appropriate. ... we consider the following as primary care providers:

1. Private office-based practicing physicians who are internists, pediatricians, obstetrician-gynecologists, family practitioners, and general practitioners.

2. Health Department Clinics.

3. Primary care centers, including children and youth projects, community health centers, organized group practices, and hospitals, 'family practice', 'walk-in', or 'ambulatory care' centers."

The emphasis here is on point of contact. Consideration is also given to a broad spectrum of care from simple to complex situations. No requirements are proposed for the range of practitioners.

"Primary health care services are visually provided to ambulant patients. They include the diagnosis and treatment of such patients by a physician, ... such services as emergency care, dentistry, preventive medicine, home health care, optometry, pharmacy, health education, counseling, and social service that are provided by other health professionals separately or with physicians. It is care rendered at the patient's first point of contact with the health care system. The health care facilities associated with these primary care services would in most cases be facilities capable of supporting limited arrays of services and with strong ties to secondary level resources."

It is important for this study to identify what appears to be a confusion of terms. One of the more significant findings of the interviews was the feeling that licensed practical nurses would be replaced by "primary nurses" or "primary care". Yet there seems to be no major concerns among health care professionals as to what "primary" means nor is there concensus on who whould provide such care.

Similar confusion surrounds the terms "secondary" and "tertiary".

TECHNICAL EDUCATION

Another assumption of the Minnesota Nurses Association involved their use of the term "Technical Education". It was defined in the MNA position paper as follows:

> "Technical Education in our society has come to mean the following:
>
> a) A blend of technical and supportive general education.
>
> b) Emphasis on the problem-solving process but with common recurring situations that require standardized responses and only limited bio-psycho-social basis for decision making.
>
> c) Action based on principles.
>
> d) A two-year degree from an associate degree granting institution."

Again, there appears to be a slight confusion in terms. The American Medical Association defines a technician as follows:

> "One who specializes in the technical details of a subject; one who has acquired the ability to perform a complex task or set of tasks. These abilities and skills are visually acquired through formal educational programs of two years or less in length. Some of these skills and abilities may be acquired through preceptorial experiences."

Their definition of a technician implies that the educational requirements may be less than two years, as suggested by the MNA. They further suggest that the abilities of a technician may be acquired through preceptorial experiences which could involve competency based education.

The U.S. Office of Education in defining the term "technical" is also less explicit in defining educational format. Their definition is as follows.

> "Technical - A term denoting a level of knowledge and skills possessed by an individual or required of an individual to perform an assignment. The level of skill is attained through education and training, usually including, at a minimum, an associate degree (or its equivalent obtained through special study and/or experience).

The specification of a two-year degree, as suggested by the MNA may involve an inappropriate requirement in nursing education.

MINNESOTA DIPLOMA PROGRAM GRADUATES

The current status of the diploma programs serves to illustrate the apparent inconsistency between theory and practice, and it raises some basic issues over the determination of the viability of any educational program. The results of this study point to the diploma program graduates as the best qualified entry level nurse practitioner. Yet, these programs are being phased out of existence because, among other things, it is said that they are too expensive, and because college credit is not given for much of the training. If, however, Federal reimbursement policies for hospital operating costs under Medicare and Medicaid were modified, program costs would take on entirely different dimensions. In addition, if the growing trend of providing college credit for life competencies, as found in at least one State university and several community colleges, could be applied toward clinical nursing skills, the college credit issue may be alleviated.

The study indicated that those who hire and utilize nurses have a high regard for diploma graduates. Yet, it appears as though the diploma programs are being phased out for reasons not clearly associated with the quality or ability of the graduates of the programs. Even more perplexing is the suggestion that the diploma graduate be replaced by nurse practitioners who the study finds are generally considered unprepared and unacceptable for entry level employment. Certainly a great deal of study has gone into the handling of the diploma programs. But to the lay investigators who gathered the data, many questions remain unanswered.

STATUS AND VIABILITY OF LPN PROGRAMS

This study attempted to compare the competencies of several beginning nurse practitioners in order to assess the current status of the licensed practical nurse programs. From the results of the questionnaires and personal interviews, it appears that those in the field who hire and direct LPNs hold them in high regard. In fact, the expressions of those who are working in the field appear in sharp contrast to the position expressed by the professional associations and by those in educational agencies who direct the fate of nursing programs.

The EMS project team received many comments on how the LPN program may be kept intact or be modified, if necessary to meet future needs. Most comments of this sort compared the licensed practical nurse program with the associate degree program.

The distinctions between the LPN and the AD nurse centered on the lack of clinical skills for the AD and the lack of assessment and decision making skills of the LPN. To correct the

perceived deficiency in LPN programs, several respondents felt that they could be expanded from the current ten month duration to eighteen months. This move, many felt, would result in an excellent practitioner.

The expansion of the LPN program would, however, cause problems with the AD programs. Both would then be eighteen months in length, but the LPN would still be seen as superior to the AD in total nursing skills. The AD, on the other hand would qualify to become a registered nurse, a designation that at present is not available to the LPN. Expanding the AD program to accommodate for the expressed lack of clinical skills would no longer make it a "two-year" program, and would tend to equate it to the Diploma Nurse programs which consist of approximately twenty-seven months.

To convert some of the existing eighteen months of the AD program to training for clinical skills would equate with an expanded LPN program. Some resolution would then have to be made with the "registered nurse" designation since AD nurses would quite likely not be willing to give up that title.

It appears as though the AD program would have difficulty either in extending the length of the program, or in restructuring the program to accommodate the clinical skills deficiency. In either instance, they are constrained by existing LPN and diploma programs. The AD program it seems is already extended by those health care centers that require graduates to participate in clinical skill training as a condition of first employment.

It is this difficulty with the AD program that most seriously effects the status of the LPN programs. The Minnesota Nurses Association and others have taken the position that the Associate Degree programs should serve as the preferred entry-level nursing position in place of Licensed Practical Nurses. These positions are difficult to reconcile with the findings of this study which suggest that the AD graduates are presently considered unacceptable as entry-level nurses. It is even more difficult when it is apparent that the LPN program could be extended to the same length as the Associate Degree programs and yield a distinctively more acceptable nurse.

In short, the status of the LPN appears high by those now providing care in hospitals and nursing homes. There status is much lower, however, in the opinion of those who propose changes in the structure and format of nursing education. It appears that the resolution of their status and viability must occur outside the findings of this study.

V. SUMMARY

In February, 1977, the Minnesota State Department of Education contracted with Educational Management Services, Inc. (EMS) to study the status and viability of the licensed practical nursing (LPN) programs in the State of Minnesota. The study was promoted by the Committee on the Future of Practical Nursing Education which is made up of LPN program directors from area vocational-technical institutes, community colleges, and one private educational facility.

EMS constructed a 39-item questionnaire from statements of nursing competency that were developed by LPN and associate degree nursing (ADN) program directors and faculty. The questionnaire items consisted of those that were taken verbatim from the LPN list of competencies, LPN competency statements that were only slightly modified for clarity, combinations of LPN and ADN competency statements, and statements that were constructed by EMS investigators that represented skills that entry level LPNs should not be expected to perform.

The questionnaire items were presented as nursing skills, and the respondents were asked to select from among four nurse practitioners who they felt would possess the skill at the time of initial job placement. The four practitioners were nursing assistant, licensed practical nurse, associate degree nurse, and baccalaureate degree nurse. Diploma nurses were not listed in the questionnaire because of the desire to focus on the differentiation between the LPN and the ADN.

For each questionnaire item, a majority of respondents, ranging from 50.9% to 95.7%, selected the licensed practical nurse as being the appropriate entry level practitioner who could perform the skill.

EMS investigators also conducted interviews with directors of nursing, health care administrators, and nurse practitioners in metropolitan and outstate hospitals and nursing homes. The respondents were asked to evaluate all entry level nurses and to state their preference as to the ones they felt were the best qualified for the jobs they were to perform.

An almost unanimous majority of those interviewed preferred the diploma nurse followed by the licensed practical nurse and the baccalaureate degree nurse. In contrast, the entry level associate degree nurse was uniformly rejected and was considered by many to be unqualified as an entry level registered nurse.

In determining the status and viability of their programs, the licensed practical nurses were intentionally compared with

other nurse practitioners. Examination of current literature, educational policy statements, and professional nurse association papers from many parts of the country reveal a trend toward the abandonment of the licensed practical nurse programs in preference for alternative nurse training programs.

The investigators assessed the interview and questionnaire data against the assumptions, definitions, and justifications that were offered by those who support this trend. In several instances, this proved very confusing. For example, the definitions of "health care," upon which recommendations for entry level training are based, are neither consistent nor equivalent. Terms such as "primary," "secondary," and "tertiary" health or nursing care appear to mean different things to different people in different parts of the country. This confusion makes the finding of this study difficult to assess in concert with emerging trends.

Because this study was directed specifically toward conditions in Minnesota, careful study was given to the concerns of the Minnesota Nurses Association. Their "proposed position paper on undergraduate nursing education basic for entry into beginning nursing practice in the State of Minnesota" is still in the developmental stages, but the assumptions on which it is based have a significant impact on the findings of this study and on the status and viability of the LPN programs.

The task force which developed the MNA position paper believes that "an educational program of one year in length does not provide sufficient time to produce the practitioner for first level nursing care." This essentially means that the MNA does not accept the LPN programs as they presently exist even though the study data indicate that these graduates are widely accepted and preferred throughout the State by those responsible for hiring and supervision.

The MNA task force also believes that "nursing education must take place in an educational institution" which suggests rejection of the remaining hospital centered diploma programs, the graduates of which appear to be the most sought after entry level practitioners.

The MNA task force suggests two training programs which should provide the entry level practitioners. Associate degree nursing programs, now provided only in State community colleges, would produce "registered nurse associates." The present associate degree program graduates were found to be the least acceptable entry level nurses, and in many instances they were rejected for consideration by those responsible for hiring. The second program would involve baccalaureate preparation and would produce a "registered nurse," as is now the case.

EMS recognizes that the Minnesota Nurses Association position paper is not a statement of educational policy that will be implemented in the immediate future. Nor do the investigators submit that the findings of this study invalidate the assumptions of the

MNA. This study does, however, identify several inconsistencies that exist in the perceptions of those who train, employ, and utilize nurse practitioners. These inconsistencies should be critically analyzed and resolved before a definitive statement can be made about the status and viability of licensed practical nursing programs in the State of Minnesota. Because of the interrelationships among the nurse practitioners, one cannot be assessed without studying the problems that confront them all.

The current status of the diploma programs serves to illustrate the apparent inconsistency between theory and practice, and it raises some basic issues over the determination of the viability of any educational program. The results of this study point to the diploma program graduates as the best qualified entry level nurse practitioner. Yet, these programs are being phased out of existence because, among other things, it is said that they are too expensive, and because college credit is not given for much of the training. If, however, Federal reimbursement policies for hospital operating costs under Medicare and Medicaid were modified, program costs would take on entirely different dimensions. In addition, if the growing trend of providing college credit for life competencies, as found in at least one State university and several community colleges, could be applied toward clinical nursing skills, the college credit issue may be alleviated.

The study indicated that those who hire and utilize nurses have a high regard for diploma graduates. Yet, it appears as though the diploma programs are being phased out for reasons not clearly associated with the quality or ability of the graduates of the programs. Even more perplexing is the suggestion that the diploma graduate be replaced by nurse practitioners who the study finds are generally considered unprepared and unacceptable for entry level employment. Certainly a great deal of study has gone into the handling of the diploma programs. But to the lay investigators who gathered the data, many questions remain unanswered.

The results of this study indicate that the status of the LPN program graduates is high, and there is no substantial evidence to suggest that the programs will be eliminated. But the process of decision-making and policy formation related to the viability of any nurse training program appears difficult to understand and hard to reconcile with real-life provision of nursing care. Those who now provide and direct LPN programs may wish to examine the methodology and assumptions that can eliminate some programs while providing support and enhancement to others.

The results of this study must also stand the tests of validation especially as they are perceived as impeding educational innovation or suggesting modification or retention of existing programs.

APPENDIX A

QUESTIONNAIRE

SURVEY OF LICENSED PRACTICAL NURSING SKILLS

Listed below are thirty-nine statements which represent various nursing skills. Would you please read each statement carefully, and then respond according to the following format:

(1) If you feel you could reasonably expect a Licensed Practical Nurse to perform that skill at the time of initial job placement, circle (◯) the letters LPN.

(2) If you feel a LPN could not, or should not, perform the skill at the time of initial job placement, mark an "X" through the letters LPN, and identify the specialist who would possess that skill.

(3) If you feel a LPN could perform the skill following a period of employment, circle (◯) LPN and indicate in the adjacent space the number of months you would expect would pass before the skill could be performed.

(4) If you feel your response to any item should be qualified, please feel free to enter your comments in the space below the statement, or on the questionnaire. If you find it impossible to respond to an individual item, leave it and continue with the next item.

Thank you for your cooperation.

For Office Use Only	LIST OF SKILLS	NURSE PRACTITIONER			
		Nursing Assistant	Licensed Practical Nurse	Associate Degree Nurse	Baccalaureate Degree Nurse
	1. Teaches the importance of proper nutrition and explains the modification of special diets.	NA	LPN	ADN	BDN
	2. Adapts nursing measures to meet basic needs of patients at all stages of growth and development.	NA	LPN	ADN	BDN
	3. Administers basic supportive nursing care to the semi-conscious and unconscious patient.	NA	LPN	ADN	BDN
	4. Operates circo-lectric bed, Stryker frame, or patient lifters when lifting or moving patients.	NA	LPN	ADN	BDN
	5. Admits patients.	NA	LPN	ADN	BDN
	6. Observes common signs and symptoms of oxygen insufficiency, and initiates appropriate action, such as application of an oxygen mask, insertion of a cannula, or use of a humidifier.	NA	LPN	ADN	BDN

7. Observes, records, and reports patient's acceptance and/or tolerance of diet.	NA	LPN	ADN	BDN
8. Adapts basic nursing care to meet special needs of sensory-deprived and mentally-handicapped individuals.	NA	LPN	ADN	BDN
9. Gathers data from chart references, books, patient, and family, and team conferences to use in preparing a nursing care plan.	NA	LPN	ADN	BDN
10. Observes signs of anxiety; verbal and non-verbal.	NA	LPN	ADN	BDN
11. Identifies, records, and reports early common signs of tissue anoxia, edema, or breakdown; infection contractures and deformities.	NA	LPN	ADN	BDN
12. Identifies patients' needs and problems and initiates nursing care plans.	NA	LPN	ADN	BDN
13. Identifies, records, and reports signs of shock or hypertension.	NA	LPN	ADN	BDN
14. Maintains intravenous therapy by changing bottles, tubing, or dressing, by regulating the rate of administration, or by discontinuing the flow.	NA	LPN	ADN	BDN
15. Implements prescribed therapeutic activity such as dangling, ambulating, passive range of motion, etc.	NA	LPN	ADN	BDN
16. Observes the effectiveness of, or reaction to respiratory therapy.	NA	LPN	ADN	BDN
17. Identifies and reports obvious signs and symptoms of elimination problems.	NA	LPN	ADN	BDN
18. Observes for and identifies therapeutic and side effects of medications.	NA	LPN	ADN	BDN
19. Records and reports emotional responses.	NA	LPN	ADN	BDN

20. Correctly turns, positions, and supports patients.	NA	LPN	ADN	BDN
21. Monitors flow of intravenous fluids according to doctor's orders and observes the intravenous site for complications.	NA	LPN	ADN	BDN
22. Evaluates and updates care plans and goals.	NA	LPN	ADN	BDN
23. Utilizes appropriate resources to determine dosage, action, and side effects of drugs.	NA	LPN	ADN	BDN
24. Evaluates adequacy of functioning of nasogastric tubes, and proper positioning to promote drainage and prevent trauma.	NA	LPN	ADN	BDN
25. Appraises, records, and reports patient's response to nursing care.	NA	LPN	ADN	BDN
26. Supports mental health through the establishment of positive interpersonal relationship.	NA	LPN	ADN	BDN
27. Prepares and safely administers medications, such as eye, ear, and nose drops.	NA	LPN	ADN	BDN
28. Observes, measures, records, and reports adequate, inadequate or excessive fluid intake.	NA	LPN	ADN	BDN
29. Participates in reality orientation measures.	NA	LPN	ADN	BDN
30. Identifies, records, and reports symptoms of circulatory deficiency and performs prescribed therapeutic measures as necessary.	NA	LPN	ADN	BDN
31. Evaluates own performance in nursing situations.	NA	LPN	ADN	BDN

32. Uses appropriate techniques such as irrigation when caring for patients with wounds.	NA	LPN	ADN	BDN
33. Supports patients through stages of adjustment to death and dying such as denial, anger, bargaining, depression, and acceptance.	NA	LPN	ADN	BDN
34. Cares for patients in traction and with casts, observing principles of safety, body positioning, and exercise.	NA	LPN	ADN	BDN
35. Discharges patients.	NA	LPN	ADN	BDN
36. Evaluates effects of communications on co-workers and patients.	NA	LPN	ADN	BDN
37. Maintains proper techniques for patients on isolation both for the patient's protection as well as for other patients and personnel.	NA	LPN	ADN	BDN
38. Administers common nursing procedures related to elimination such as administering enemas, rectal suppositories, colostomy or catheter irrigation, and catheterization.	NA	LPN	ADN	BDN
39. Employs nursing measures to relieve pain or discomfort, (e.g., back rubs, position change and diversion, etc.).	NA	LPN	ADN	BDN

From the items below will you please place a check (✓) in the blank by the one that best describes your current position:

_____Current LPN student

_____LPN Program Director/Faculty

_____Employed LPN

_____Staff Nurse

_____Head Nurse

_____Health Care Administrator

_____ADN Program Director/Faculty

_____Other *(Please Specify)*_____

Will you also please check (✓) the instructional program(s) which you completed:

_____ Nursing Assistant

_____ Licensed Practical Nurse

_____ Diploma Program

_____ Associate Degree Nurse

_____ Baccalaureate Nurse Program

_____ Masters Degree - Nursing

_____ Other *(Please specify degree and major below)*

_____

CATEGORY A - ITEMS THAT WERE TAKEN DIRECTLY FROM THE LPN LIST OF COMPETENCIES.

1) Teaches the importance of proper nutrition and explains the modification of special diets.

2) Adapts nursing measures to meet basic needs of patients at all stages of growth and development.

3) Administers basic supportive nursing care to the semi-conscious and unconscious patient.

8) Adapts basic nursing care to meet special needs of sensory-deprived and mentally-handicapped individuals.

10) Observes signs of anxiety; verbal and non-verbal.

16) Observes the effectiveness of, or reaction to respiratory therapy.

18) Observes for and identifies therapeutic and side effects of medications.

19) Records and reports emotional responses.

20) Correctly turns, positions, and supports patients.

21) Monitors flow of intravenous fluids according to doctor's orders and observes the intravenous site for complications.

23) Utilizes appropriate resources to determine dosage, action, and side effects of drugs.

*24) Evaluates adequacy of functioning of nasogastric tubes, and proper positioning to promote drainage and prevent trauma.

26) Supports mental health through the establishment of positive interpersonal relationship.

28) Observes, measures, records, and reports adequate, inadequate or excessive fluid intake.

29) Participates in reality orientation measures.

31) Evaluates own performance in nursing situations.

*"Nasogastric" substituted for "drainage."

CATEGORY B - ITEMS THAT CONTAIN WORDS THAT WERE ADDED TO THE LPN COMPETENCY STATEMENTS.

7) Observes, [records, and reports] patient's acceptance and/or tolerance of diet.

11) Identifies, [records, and reports] early common signs of tissue anoxia, edema, or breakdown; infection contractures and deformities.

13) Identifies, [records, and reports] signs of shock or hypertension.

15) Implements prescribed [therapeutic] activity [such as] dangling, ambulating, passive range of motion, etc.

17) Identifies [and reports] obvious signs and symptoms of elimination problems.

25) Appraises, [records, and reports] patient's response to nursing care.

30) Identifies, [records, and reports] symptoms of circulatory deficiency and performs prescribed therapeutic measures as necessary.

37) Maintains proper techniques for patients on isolation [both for the patient's protection as well as for other patients and personnel.]

*33) Supports patients through stages of adjustment to death and dying such as denial, anger, bargaining, depression, and acceptance.

34) Cares for patients in traction and with casts, observing principles of safety, body positioning, and exercise.

39) Employs nursing measures to relieve pain or discomfort, (e.g., back rubs, position change and diversion, etc.).

*Substituted "death and dying" for "loss."

CATEGORY C - ITEMS THAT WERE A COMBINATION OF AD AND LPN COMPETENCY STATEMENTS.

(LPN Competency)

Assists with operating of circ-o-lectric bed, Stryker frame or patient lifters.

(AD Competency)

Positioning, moving, and transferring patients.

(Questionnaire Item)

4) [Operates] circo-lectric bed, Stryker frame, or patient lifters [when lifting or moving patients.]

(LPN Competency)

Admits patients utilizing procedure of the institution, discharges patients according to institution procedure.

(AD Competency)

Admitting, transferring, and discharging patients.

5) Admits patients.

35) Discharges patients.

(LPN Competency)

Observes common signs and symptoms of oxygen insufficiency, and initiates appropriate action.

(AD Competency)

Oxygen administration via mask, cannula, circupette. Use of humidifiers.

6) Observes common signs and symptoms of oxygen insufficiency, and initiates appropriate action, [such as application of an oxygen mask, insertion of a cannula, or use of a humidifier.]

(LPN Competency)

Gathers data from chart references, books, patient, and family, and team conferences to use in preparing her plan of care.

9) Gathers data from chart references, books, patient, and family, and team conferences to use in preparing a [nursing care plan.]

(Questionnaire item)

36) Evaluates effects of communications on co-workers and patients.

(LPN Competency)

Administers common nursing procedures related to elimination: enemas, rectal suppositories, colostomy irrigation, catheterization, catheter irrigation.

38) Administers common nursing procedures related to elimination such as administering enemas, rectal suppositories, colostomy or catheter irrigation, and catheterization.

(LPN Competency)

Identifies needs and problems.

(AD Competency)

...Initiate and/or assign others to implement nursing actions...

(Questionnaire item)

12) Identifies patients' needs and problems and initiates nursing care plans.

(LPN Competency)

Assists registered nurse in evaluating and updating care plans and goals.

(Questionnaire item)

22) Evaluates and updates care plans and goals.

(LPN Competency)

Prepares and administers medications safely according to agency policy.

(AD Competency)

Administration of ... eye, ear, and nasal medications.

(Questionnaire item)

27) Prepares and safely administers medications, such as eye, ear, and nose drops.

(LPN Competency)

Uses appropriate techniques when caring for patients with wounds

(AD Competency)

Irrigations

(Questionnaire item)

32) Uses appropriate techniques such as irrigation when caring for patients with wounds.

(LPN Competency)

Identifies effects of communications on co-workers and patients.

CATEGORY D - ITEM THAT WAS NOT LISTED AS AN LPN COMPETENCY.

(AD Competency)

Maintenance of I.V. therapy - changing bottles, bags, tubing, and dressings - regulation of rates - discontinuing.

14) Maintains intravenous therapy by changing bottles, tubing, or dressing, by regulating the rate of administration, or by discontinuing the flow.

APPENDIX B

INTERVIEW FORM

INTERVIEW QUESTIONNAIRE

1. What proportion of your nursing staff consists of...
   Nursing Assistants_____? Licensed Practical Nurses_____?
   Associate Degree Nurses_____? Diploma Nurses_____?
   Baccalaureate Degree Nurses_____?

2. Do you try to maintain these same proportions when hiring new staff? Yes_____ No_____

3. Do you expect the proportions to remain relatively stable over the next few years? Yes_____ No_____ If not, what changes do you foresee and why?

4. Will staffing patterns needed to meet health care needs in the future remain as they are now for entry level positions?
   Yes_____ No_____ If not, what changes in entry level staffing do you anticipate?

5. Do you have formal job descriptions for your nursing staff?
   Yes_____ No_____ (IF YES, OBTAIN COPIES)

6. Do you feel that a career ladder now exists for Nursing Assistants, Licensed Practical Nurses, Associate Degree Nurses, and Baccalaurate Degree Nurses? Yes_____ No_____

7. Do you see any obvious shortcomings in the competencies of any of the nursing specialists at the time of initial employment? Yes_____ No_____ Are any of the candidates lacking in competencies that you would have expected to find? Yes_____ No_____

8. Are there elements of the nursing profession that you would like to see incorporated uniformly in all training programs?
Yes___ No___

9. Apart from institutional policies, are there concerns you have about the competencies of entry level nursing personnel that limit your assignment of staff in nursing care plans?
Yes_____ No_____

10. Is a nurse's ability to meet health care needs a factor of the program they completed or of their clinical experience? Program_____ Experience_____ Are factors other than training or experience equally as important? What are they?

11. Are the distinctions between entry level nursing specialties clearly defined in every instance? Yes_____ No_____

12. Please assess the job entry preparation of each of the following, considering the knowledge and skills they bring to their job in relation to the training program they have just completed.

(A) Nursing Assistant-

(B) Licensed Practical Nurse-

(C) Associate Degree Nurse -

(D) Baccalaureate Degree Nurse-

* * * * * * * * * * * *

_____ Go through the Survey of Nursing Skills

_____ Obtain salary data on all positions

_____ Obtain data about this facility (number of beds, number of patients, type of facility, location, etc.)